

### THEHANFORDSITE

# Engineering Evaluation / Cost Analysis on Proposed Alternatives for 200 West Area Tier 2 Buildings/Structures Removal Action

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### **Briefing Purpose**

- Introduce Tier 2 buildings/structures
- Outline removal action objectives
- Provide overview of removal action alternatives considered, including preferred alternative





#### Introduction

### What is a Hanford Tier 2 facility?

 Tier 2 facilities are buildings or structures that are chemically and/or radiologically contaminated due to Hanford's past nuclear materials production mission and require a Comprehensive Environmental Response, Compensation, and Liability Act response action because of the potential for a release of hazardous substances

### Other facility categories at Hanford

- Tier 1 facilities
- General Decommissioning facilities

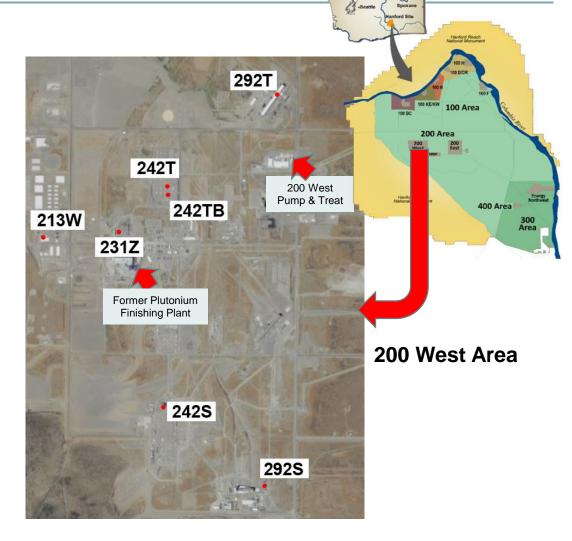






**200 West Area Tier 2 Buildings/Structures** 

- 231Z, Materials Engineering Lab
- 213W, Waste Compactor Building
- 292S, Jet Pit House
- 292T, Fission Products Release Lab
- 242S, Evaporator Facility
- 242T, Waste Disposal Evaporator Building
- 242TB, Vent House









## 200 West Area Tier 2 Buildings/Structures (cont.)







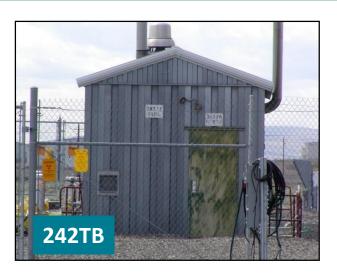








### 200 West Area Tier 2 Buildings/Structures (cont.)













### **Removal Action Objectives**

The removal action objectives are general descriptions of what the removal action is expected to accomplish

- Reduce the inventory and any potential threat to human health and the environment from exposure to those substances
- Minimize general disruption and adverse effects on cultural resources and wildlife habitat
- Safely treat, as appropriate, and dispose of waste generated by the removal action
- Be consistent with anticipated remedial actions in the 200 West Area
- Minimize or eliminate the need for future surveillance and maintenance activities







### **Removal Action Alternatives**

| Alternative | Removal Action Description  | Present-Worth Cost |
|-------------|---|--------------------|
| 1           | No Action   | \$0                |
| 2           | <ul> <li>Continued surveillance and maintenance (for at least 15 years) of the 200 West Area Tier 2 buildings/structures with facility life-cycle upgrades (e.g., roof repairs)</li> <li>Future deactivation, decommission, decontamination, and demolition of the 200 West Area Tier 2 buildings/structures</li> </ul> | \$149.2 million    |
| 3           | <ul> <li>Continued surveillance and maintenance of the 200 West Area Tier 2 buildings/structures</li> <li>Near-term deactivation, decommission, decontamination, and demolition of the 200 West Area Tier 2 buildings/structures</li> </ul>   | \$135.2 million    |

### Why is Alternative 3 preferred?

- · Technically feasible
- Eliminates the need for extensive ongoing preventive measures and inspections
- Supports implementation of future remedial actions
- Achieves the highest degree of interim and long-term protection of human health and the environment by reducing chemical, radiological and physical hazards







### **Summary / Key Takeaways**

- The Engineering Evaluation / Cost Analysis evaluated three alternatives for a non-time-critical removal action for seven Tier 2 buildings/structures in Hanford's 200 West Area
- The preferred alternative includes near-term removal of these buildings to reduce risk of a release of hazardous substances and lower overall Hanford surveillance and maintenance costs.
- This action supports ongoing activities to reduce risk on Hanford's Central Plateau







### **Public Comment Opportunity**

See the Hanford Events Calendar on <a href="Hanford.gov">Hanford.gov</a> for details on the Engineering Evaluation / Cost Analysis public comment period, including links to supporting documents and a fact sheet

The public is encouraged to submit comments on the proposed alternatives through April 30 to <a href="mailto:Tier2EECA@rl.gov">Tier2EECA@rl.gov</a> (preferred) or in writing to:

U.S. Department of Energy

Attn: Jennifer Colborn

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